Statistical Methodologies:

Bell Atlantic will use statistical methodologies as one means to determine if "parity" exists, or if the performance for CLECs is equivalent to the performance for Bell Atlantic. For performance measures where "parity" is the standard and sufficient sample size exists, Bell Atlantic will use the "modified Z statistic" proposed by a number of CLECs in LCUG (Local Competitors User Group). The specific formulas are detailed below:

Measured Variables:	Counted Variables:
$t = \frac{\overline{X}_{CLEC} - \overline{X}_{BA}}{\sqrt{s_{BA}^2(\frac{1}{n_{CLEC}} + \frac{1}{n_{BA}})}}$	$Z = \frac{P_{CLEC} - P_{BA}}{\sqrt{P_{BA}(1 - P_{BA})(\frac{1}{n_{CLEC}} + \frac{1}{n_{BA}})}}$

Definitions:

Measured Variables are metrics of means or averages, such as mean time to repair, or average interval.

Counted Variables are metrics of proportions, such as percent measures.

$\overline{X}$ is defined as the average performance or mean of the sample
S^2 is defined as the standard deviation
n is defined as the sample size
p is defined as the proportion, for percentages 90% translates to a 0.90 proportion

A Z or t score of below –1.645 provides a 95% confidence level that the variables are different, or that they come from different processes.

Sample Size Requirements:

The standard Z or t statistic will be used for measures where "parity" is the standard, unless there is insufficient sample size. For measured variables, the minimum sample size is 30. For counted variables, np(1-p) must be greater than or equal to 5. When the sample size requirement is not met, BA will do the following:

a.) If the absolute performance for the CLEC is better than the BA performance, no statistical analysis is required.
b.) If the performance is worse for the CLEC than BA, BA will use the t distribution or binomial (counted or measured) until such time as a permutation test can be run in an automated fashion.
c.) If the t or binomial distribution show an "out of parity" result, BA will run the permutation test.
d.) If the permutation test shows an "out of parity" condition, BA will perform a root cause analysis to determine cause. If the cause is the result of "clustering" within the data, BA will provide such documentation. The nature of the variables used in the performance measures is that they do not meet the requirements 100% of the time for any statistical testing. Individual data points are not independent. The primary example of such non-independence is a cable failure. If a particular CLEC has fewer than 30 troubles and all are within the same cable failure with long duration, the performance will appear out of parity. However, for all troubles, including BA troubles, within that individual event, the trouble duration is identical. Another example of clustering is if a CLEC has a small number of orders in a single location, with a facility problem. If this facility problem exists for all customers served by that cable and is longer than the average facility problem, the orders are not independent and clustering occurs. Finally, if root cause shows that the difference in performance is the result of CLEC behavior, BA will identify such behavior and work with the respective CLEC on corrective action.

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Exceptions:

A key frailty of using statistics to evaluate parity is that a key assumption about the data, necessary to use statistics, is faulty. One such assumption is that the data is independent. Events included in the performance measures of provisioning and maintenance of telecommunication services are not independent. The lack of independence is referred to as "clustering" of data. Clustering occurs when individual items (orders, troubles etc.) are clustered together as one single event. This being the case, Bell Atlantic will file an exception to the performance scores if the following events occur:

a.) **Event Driven Clustering- - Cable Failure**: If a significant proportion (more than 30%) of a CLECs troubles are in a single cable failure, BA will provide the data demonstrating that all troubles within that failure, including Bell Atlantic troubles were resolved in an equivalent manner. Then, BA will provide the repair performance data with that cable failure performance excluded from the overall performance for both the CLEC and BA and the remaining troubles compared according to normal statistical methodologies.

b.) **Location Driven Clustering - - Facility Problems**: If a significant proportion (more than 30%)of a CLECs missed installation orders and resulting delay days were due to an individual location with a significant facility problem, BA will provide the data demonstrating that the orders were "clustered" in a single facility shortfall. Then, BA will provide the provisioning performance with that data excluded. Additional location driven clustering may be demonstrated by disaggregating performance into smaller geographic areas.

c.) **Time Driven Clustering - - Single Day Events**: If significant proportion (more than 30%)of CLEC activity, provisioning or maintenance, occur on a single day within a month, and that day represents an unusual amount of activity is in a single day, BA will provide the data demonstrating that the activity is on that day. BA will compare that single day's performance for the CLEC to BA's own performance. Then, BA will provide data with that day excluded from overall performance to demonstrate "parity".

d.) **CLEC Actions**: If performance for any measure is impacted by unusual CLEC behavior, BA will bring such behavior to the attention of the CLEC to attempt resolution. Examples of CLEC behavior impacting performance results include order quality, causing excessive missed appointments, incorrect dispatch identification, resulting in excessive multiple dispatch and repeat reports, inappropriate X coding on orders, where extended due dates are desired, and delays in rescheduling appointments, when BA has missed an appointment. If such action negatively impacts performance, BA will provide appropriate detail documentation of the events and communication to the individual CLEC and the Commission.

Documentation:

BA will provide all details, ensuring protection of customer proprietary information to the CLEC and Commission. Details include, individual trouble reports, and orders with analysis of BA and CLEC performance. For cable failures, BA will provide appropriate documentation detailing all other troubles associated with that cable failure.